

DOCKET: CU-4433

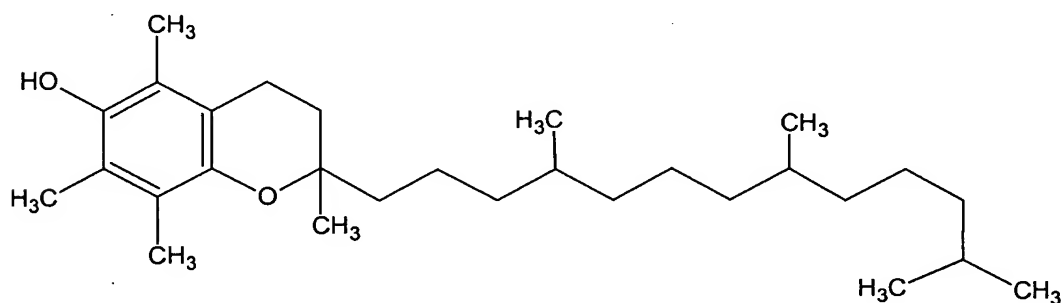
**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

APPLICANT: Karl NIDEBORN et al.

TITLE: MATERIAL FOR PACKAGING PURPOSES

**AMENDED CLAIMS**

1. (currently amended) A material for packaging purposes comprising a first layer which comprises a polymer material, wherein said first layer has a first surface intended to be turned towards a packaging object, characterized in that wherein said first layer comprises one or more compounds having ~~[[the]]~~ an activity of ~~"vitamin-E"~~ vitamin E in a total concentration of at least 700 ppm for preventing oxidation of the packaging object.
2. (original) A material according to claim 1, wherein said total concentration is at least 5000 ppm.
3. (currently amended) A material according to claim 1~~[[or 2]]~~, wherein said total concentration is at least 10000 ppm.
4. (currently amended) A material according to ~~any of the preceding claims~~ claim 1, wherein said one or more compounds having the activity of ~~"vitamin-E"~~ vitamin E is  $\alpha$ -tocopherol according to a formula~~[[ (1) ]]~~,



wherein by  $\alpha$ -tocopherol according to the formula  $[(1)]$  it is meant compounds selected from dl- $\alpha$ -tocopherol, d- $\alpha$ -tocopherol and all other stereoisomers of  $\alpha$ -tocopherol.

5. (currently amended) A material according to ~~any of the preceding claims~~ claim 1, wherein the material comprises a second layer which is a strengthening layer and/or and a third layer which exhibits heat resistance.

6. (currently amended) A material according to ~~any of the preceding claims~~ claim 1, wherein the material comprises a material combination which gives a barrier and heat resistance, and the material combination may comprise comprises a barrier layer.

7. (currently amended) A material according to ~~any of the preceding claims~~ claim 1, wherein the material comprises further layer/s at least one further layer comprising said polymer material.

8. (currently amended) A material according to ~~any of the preceding claims~~ claim 1, wherein said polymer material comprises polyolefin and/or polyester based polymers, for example, polyethylene (PE), polypropylene (PP), amorphous polyethylene terephthalate (APET), polyvinyl chloride (PVC), polycarbonate (PC) and/or other layer, which gives strength and heat resistance, or only heat resistance.

9. (currently amended) A material according to ~~any of claims 5-8~~ claim 5, wherein said second layer and/or and said third layer, independently of each other, comprise at least one selected from the group of: OPET, OPA, oriented polypropylene (OPP), amorphous polyethylene terephthalate (APET)  $[[\text{or}]]$  and polyvinyl chloride (PVC).

10. (currently amended) A material according to ~~any of claims 5-9~~ claim 5, wherein said third layer has been formed by using methods such as crosslinking or by use of high temperature melting polymers or protective lacquers.

11. (currently amended) A material according to ~~any of claims 5-10~~ claim 6, wherein said barrier layer comprises at least one selected from the group of: copolymer of ethylene and vinyl alcohol (EVOH), polyvinyl alcohol (PVOH), polyvinyl dichloride (PVDC) ~~[[or]]~~ and vacuum deposited barrier layer.
12. (currently amended) A material according to ~~any of the preceding claims~~ claim 5, wherein any layer/s and/or barrier layer/s at least two of the layers are bonded together by use of a means for adhesion.
13. (currently amended) A material according to ~~any of the preceding claims~~ claim 1, wherein the total thickness of the material varies between 12  $\mu\text{m}$  and 400  $\mu\text{m}$ .
14. (currently amended) A material according to ~~any of the preceding claims~~ claim 1, wherein said polymer material is sealable.
15. (currently amended) A material according to ~~any of the claims 1-13~~ claim 1, wherein said material is for packaging of liquid packaging objects, for example, beer, wine or fruit juice.
16. (cancelled)
17. (cancelled)
18. (cancelled)
19. (new) A material according to claim 1, wherein the material comprises a second layer which is a strengthening layer.
20. (new) A material according to claim 1, wherein the material comprises a second layer which exhibits heat resistance.
21. (new) A material according to claim 8, wherein said polymer material comprises

at least one selected from group of: polyethylene (PE), polypropylene (PP), amorphous polyethylene terephthalate (APET), polyvinyl chloride (PVC), and polycarbonate (PC).

22. (new) A material according to claim 19, wherein said second layer comprises at least one selected from the group of: OPET, OPA, oriented polypropylene (OPP), amorphous polyethylene terephthalate (APET) and polyvinyl chloride (PVC).

23. (new) A material according to claim 20, wherein said second layer comprises at least one selected from the group of: OPET, OPA, oriented polypropylene (OPP), amorphous polyethylene terephthalate (APET) and polyvinyl chloride (PVC).

24. (new) A material according to claim 20, wherein said third layer has been formed by using methods such as crosslinking or by use of high temperature melting polymers or protective lacquers.

25. (new) A material according to claim 19, wherein said first and second layers are bonded together by use of a means for adhesion.

26. (new) A material according to claim 20, wherein said first and second layers are bonded together by use of a means for adhesion.

27. (new) A material according to claim 6, wherein said first layer and said barrier layer are bonded together by use of a means for adhesion.

28. (new) A method for preparing a packaging material comprising the step of:  
forming a first layer having a first surface facing a packaging object, said first layer including one or more compounds having an activity of vitamin E in a total concentration of at least 700 ppm for preventing oxidation of the packaging object.

29. (new) A method according to claim 28 further comprising the step of:  
forming at least one of a strengthening layer and a heat resistance layer on a

side of said first layer opposite said first surface.

30. (new) A method according to claim 28 further comprising the step of:  
forming a barrier layer on a side of said first layer opposite said first surface.